**SUPPLEMENTARY MATERIAL**

Table A1. Mass of separated essential oil: HD

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of fraction** | **Duration time** **for extracting essential oil** **(min)** | **Extracted essential oil’s mass****(g)** | S**tandard deviation****(g)** |
| **Experiment** |  |
|  |  | I | II | III |  |
| 1 | 5 | 3.1 | 3.3 | 3.4 | 0.13 |
| 2 | 10 | 4.9 | 5.2 | 5.2 | 0.14 |
| 3 | 15 | 5.9 | 6.3 | 6.2 | 0.17 |
| 4 | 20 | 6.6 | 6.8 | 6.9 | 0.13 |
| 5 | 25 | 7.2 | 7.5 | 7.5 | 0.14 |
| 6 | 30 | 7.8 | 8.0 | 8.0 | 0.10 |
| 7 | 40 | 8.6 | 8.8 | 8.8 | 0.10 |
| 8 | 50 | 9.2 | 9.3 | 9.4 | 0.08 |
| 9 | 60 | 9.7 | 9.8 | 9.9 | 0.08 |
| 10 | 80 | 10.6 | 10.7 | 10.8 | 0.08 |
| 11 | 100 | 11.3 | 11.4 | 11.4 | 0.06 |
| 12 | 120 | 11.9 | 12.1 | 12.1 | 0.10 |
| 13 | 150 | 12.6 | 12.8 | 12.8 | 0.10 |
| 14 | 180 | 13.2 | 13.4 | 13.4 | 0.10 |
| 15 | 210 | 13.7 | 13.9 | 13.9 | 0.10 |
| 16 | 240 | 14.1 | 14.3 | 14.3 | 0.10 |
| 17 | 285 | 14.6 | 14.8 | 14.8 | 0.10 |

Table A2. Mass of separated essential oil: SHDR

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of fraction** | **Duration time****for extracting essential oil****(min)** | **Extracted essential oil’s mass****(g)** | **Standard deviation****(g)** |
| **Experiment** |  |  |
|  |  | IV | V | VI |
| 0 | − | − | − | − |  | - |
| 1 | 5 | 9.7 | 9.4 | 9.4 |  | 0.14 |
| 2 | 10 | 12.2 | 11.9 | 11.9 |  | 0.14 |
| 3 | 15 | 13.1 | 12.8 | 12.8 |  | 0.14 |
| 4 | 45 | 14.4 | 14.2 | 14.3 |  | 0.13 |
| 5 | 75 | 15.6 | 15.5 | 15.5 |  | 0.06 |
| 6 | 135 | 16.5 | 16.4 | 16.4 |  | 0.06 |
| 7 | 195 | 17.3 | 17.2 | 17.2 |  | 0.06 |
| 8 | 285 | 17.7 | 17.6 | 17.6 |  | 0.06 |

a) The zero fraction has a mass of 0 because of the time needed for heating and stabilizing the column before extracting the fraction.